

File 347: JAPI O Dec 1976-2007/ Cct (Updated 080129)

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File 350: Derwent WPI X 1963-2008/ UD-200810

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Set	Items	Description
S1	26945	(CALL OR CALLS OR PHONECALL? ?)(3N)(DI STRI BUT???? OR MANAG ????? OR HANDL??? OR ROUT???) OR CALL() (CENTER? ? OR CENTRE? - ?) OR BRANCH(3N) (EXCHANGE? ? OR MANAG?????)
S2	10361	(SPEECH OR VOICE OR AUDIO OR TELEPHONE OR PHONE OR AUTOMAT- ?) (RESPONSE?? OR REPLY??) OR (SPEECH OR VOICE()) RESPONSE?? OR ARJ OR VRJ OR IVR OR VRS
S3	343685	EVENT? ? OR OCCURRENCE? ?
S4	1744394	WORKFLOW? ? OR FLOW? ? OR ROUTE? ? OR ROUTING OR HISTORY
S5	216028	PRI ORTY OR PRI ORTYZ? ? OR PRI ORTIS? OR I MPORTANT OR I MPOR- TANCE OR S I G N I F I C A N T OR S I G N I F I C A N C E
S6	147356	TASK? ? OR JOB? ? OR TRANSACTION? ?
S7	3165924	THREAD? ? OR PROCESS OR PROCESSES
S8	352137	QUEUE??? OR BUFFER???
S9	8581	S3(10N) S4
S10	3723	S4(5N) S5
S11	3072	S3(10N) S6
S12	3281	S5(7N) S6
S13	631	S6(10N) S8(10N) S7
S14	0	S9 AND S10 AND S11 AND S12 AND S13
S15	0	S1: S2 AND S9 AND S10 AND S11 AND S12
S16	0	S1: S2 AND S9 AND S10 AND S11 AND S13
S17	0	S1: S2 AND S9 AND S10 AND S12 AND S13
S18	0	S1: S2 AND S9 AND S11 AND S12 AND S13
S19	0	S1: S2 AND S10 AND S11 AND S12 AND S13
S20	3	S9 AND S10 AND S11 AND S12
S21	0	S9 AND S10 AND S11 AND S13
S22	0	S9 AND S10 AND S12 AND S13
S23	0	S9 AND S11 AND S12 AND S13
S24	0	S10 AND S11 AND S12 AND S13
S25	194	S1: S2 AND S9
S26	140	S1: S2 AND S10
S27	84	S1: S2 AND S11
S28	36	S1: S2 AND S12
S29	8	S1: S2 AND S13
S30	5	S1: S2 AND S9 AND S10
S31	0	S1: S2 AND S10 AND S11
S32	1	S1: S2 AND S11 AND S12
S33	13	S1: S2 AND S9 AND S11
S34	6	S1: S2 AND S10 AND S12
S35	35	S20 OR S29: S34
S36	8	S35 AND PY=1963: 1999
S37	15	S35 AND AY=1963: 1999 AND AC=US
S38	16	S36: S37

38/ 5, K/ 1 (Item 1 from file: 350)  
DI ALCG (R) File 350: Derwent WPI X  
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0014108557 - Drawing available  
WPI ACC NO: 2004-292845/200427  
XRPX Acc No: N2004-232438

**Transaction processing method for automatic call distributor, involves assigning highest priority to received real-time transaction, and processing transaction based on content included in transaction**

Patent Assignee: ASPECT COMMUNICATIONS CORP (ASPE-N)

Inventor: DILIP V; JAWAHAR J; VAI DYANTHAN M

Patent Family (1 patents, 1 countries)

Patent Application

Number	Kind	Date	Number	Kind	Date	Update
US 6704409	B1	20040309	US 19971263	A	19971231	200427 B

Priority Applications (no., kind, date): US 19971263 A 19971231

#### Patent Details

Number	Kind	Lang	Pg	Dwg	Filing Notes
US 6704409	B1	EN	19	9	

#### Alerting Abstract US B1

NOVELTY - The type of transaction received from transaction initiator is identified, and real-time transaction is assigned with higher priority than non real-time transaction. Transaction is processed based on content in transaction and priority of transaction. An **automatic response** is output to transaction initiator, in respect of non real-time transaction based on transaction content, without interaction with an agent.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- 1.transaction controller; and
- 2.computer program product storing instructions for performing transaction process.

USE - For processing transactions in call processing system such as automatic **call distributors** (ACDs).

ADVANTAGE - Enables a particular agent to handle multiple types of transactions through a centralized control system

DESCRIPTION OF DRAWINGS - The figure shows an explanatory diagram of the transaction processing environment.

**Title Terms/Index Terms/Additional Words:** TRANSACTION; PROCESS; METHOD; AUTOMATIC CALL; DISTRIBUTOR; ASSIGN; HIGH PRIORITY; RECEIVE; REAL; TIME; BASED; CONTENT

#### Class Codes

International Classification (Main): H04M 005/00

US Classification, Issued: 379265020, 379243000, 379265010, 379265090, 379309000, 379266010

File Segment: EPI;

DWPI Class: T01; W01

Manual Codes (EPI/S-X): T01-J08C; T01-S03; W01-A06E2A; W01-B03A; W01-C02A7; W01-C02G3A

**Transaction processing method for automatic call distributor, involves assigning highest priority to received real-time transaction, and processing transaction based on content...**

**Alerting Abstract** ...time transaction. Transaction is processed based on content in transaction and priority of transaction. An **automatic response** is output to transaction initiator, in respect of non real-time transaction based on transaction...

...USE - For processing transactions in call processing system such as automatic **call distributors** (ACDs).

Original Publication Data by Authority

#### Original Abstracts:

...a Quality of Service (QoS) with each received transaction. The control system is capable of queuing a received transaction in a transaction queue if no agents are available to process the received transaction. A highest priority transaction is removed from the transaction queue when an agent becomes available to process a new transaction. >  
Basic Derwent Week: 200427

38/5, K/2 (Item 2 from file: 350)

DI ALQ R) File 350: Derwent WPI X

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0013242480 - Drawing available

WPI ACC NO: 2003-327627/200331

XRPX Acc No: N2003-261908

Computer readable recorded medium stores instructions for assigning value based on combining policy specifying manner in which data is to be contributed

Patent Assignee: LUCENT TECHNOLOGIES INC (LUCENT)

Inventor: DONG G; HULL R B; KUMAR B; LLIRBAT F; SIMON E; SU J; ZHOU G

Patent Family (1 patents, 1 countries)

Patent Application

Number	Kind	Date	Number	Kind	Date	Update
US 6499023	B1	20021224	US 1999253274	A	19990219	200331 B

Priority Applications (no., kind, date): US 1999253274 A 19990219

#### Patent Details

Number	Kind	Lang	Pg	Dwg	Filing Notes
US 6499023	B1	EN	82	40	

#### Alerting Abstract US B1

NOVELTY - The program has several computational rules associated with data items for contributing values to the data item. The final value is assigned to the data item based on combining policy which specifies the manner in which data is to be contributed to the data item.

DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

1. computer system
2. method for assigning values to data items.

USE - Used in customer call center, e-commerce, business applications for assigning priority.

ADVANTAGE - Provides powerful and flexible technique for evaluating data items based on combination factors. Enables easy maintenance and modification of system.

DESCRIPTION OF DRAWINGS - The figure shows the flowchart for assigning value to data item.

Title Terms/Index Terms/Additional Words: COMPUTER; READ; RECORD; MEDIUM; STORAGE; INSTRUCTION; ASSIGN; VALUE; BASED; COMBINATION; SPECIFIED; MANNER; DATA

#### Class Codes

International Classification (+ Attributes)

IPC + Level, Value, Position, Status, Version

G06Q 0030/00	A	I	R	20060101
H04M 0003/51	A	I	R	20060101
H04M 0003/523	A	N	R	20060101
G06Q 0030/00	C	I	R	20060101
H04M 0003/50	C	I	R	20060101

US Classification, Issued: 706046000, 345335000, 707517000

File Segment: EPI;

DWPI Class: T01

Manual Codes (EPI/S-X): T01-F02C; T01-H05B; T01-N02B1; T01-S03

Alerting Abstract ...USE - Used in customer call center, e-commerce, business applications for assigning priority...

# Original Publication Data by Authority

## Original Abstracts:

...includes the determination of whether such tasks are eligible for eager evaluation, and whether the tasks are unneeded or necessary for the processing of the received event. Workflows which satisfy described design properties allow for improved algorithms for the determination of the whether tasks are eligible, eager...  
Basic Derwent Week: 200331

38/5, K/3 (Item 3 from file: 350)

DI ALCO R) File 350; Derwent WPI X

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0013012209 - Drawing available

WPI ACC NO: 2003-090491/200308

XRPX Acc No: N2003-071467

Communication events routing system for Internet, solicits authors of events in queue through interactive voice response unit to make value contribution in exchange for data queue advancement

Patent Assignee: GENESYS TELECOM LAB INC (GENE-N); PHI LONENKO L (PHI-L)

Inventor: PHI LONENKO L

Patent Family (2 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
US 20020131399	A1	20020919	US 199824825	A	19980217	200308 B
			US 1999366434	A	19990802	
			US 2002116427	A	20020403	
US 6801520	B2	20041005	US 2002116427	A	20020403	200465 E

Priority Applications (no., kind, date): US 1999366434 A 19990802; US 199824825 A 19980217; US 2002116427 A 20020403

## Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 20020131399	A1	EN	24	9	C-I-P of application US 199824825 C-I-P of application US 1999366434 C-I-P of patent US 6044146

## Alerting Abstract US A1

NOVELTY - An interactive voice response (IVR) unit enables bidirectional communication with authors of events in a queue (69). A processor processes the events in queue according to routing rules. The authors of the communication events are solicited through the IVR unit to make a value contribution in exchange for advancement in the data queue.

DESCRIPTION - An INDEPENDENT CLAIM is included for communication events processing method.

USE - For routing communication events such as e-mails, telephony events, instant messages, voice Internet protocol event, chat, voice chat, through Internet.

ADVANTAGE - By making value contribution to the host of the routing system the communication events are routed efficiently to improve user's routing status and priority assignment in the priority queue.

DESCRIPTION OF DRAWINGS - The figure shows the block diagram illustrating a call waiting queue.

69 Queue  
Title Terms/Index Terms/Additional Words: COMMUNICATE; EVENT; ROUTE; SYSTEM; QUEUE; THROUGH; INTERACT; VOICE; RESPOND; UNIT; VALUE; CONTRIBUTE; EXCHANGE; DATA; ADVANCE

## Class Codes

International Classification (Main): H04L-012/28

US Classification, Issued: 370351000, 370411000, 370351000, 370412000, 379266020

File Segment: EPI;

DWPI Class: T01

Manual Codes (EPI/S-X): T01-C08A; T01-N02A3B; T01-N02B1

Communication events routing system for Internet, solicits authors of events in queue through interactive voice response unit to make value contribution in exchange for data queue advancement

**Alerting Abstract** ...NOVELTY - An interactive voice response (IVR) unit enables bidirectional communication with authors of events in a queue (69). A processor processes the events in queue according to routing rules. The authors of the communication events are solicited through the IVR unit to make a value contribution in exchange for advancement in the data queue...USE - For routing communication events such as e-mails, telephony events, instant messages, voice Internet protocol event, chat, voice chat, through Internet...

...ADVANTAGE - By making value contribution to the host of the routing system the communication events are routed efficiently to improve user's routing status and priority assignment in the priority queue...

Original Publication Data by Authority

#### Original Abstracts:

A routing system is disclosed for routing communication events. The system comprises at least one data queue for queuing incoming events; at least one interaction mechanism for enabling bi-directional communication with authors of events in queue; and a processor for processing events in queue according to routing rules. In a preferred embodiment authors of the communication events are solicited through the at least one interaction mechanism to make a value contribution in exchange for advancement in...

...A routing system is disclosed for routing communication events. The system comprises at least one data queue for queuing incoming events; at least one interaction mechanism for enabling bi-directional communication with authors of events in queue; and a processor for processing events in queue according to routing rules. In a preferred embodiment authors of the communication events are solicited through the at least one interaction mechanism to make a value contribution in exchange for advancement in the data queue.

#### Claims:

What is claimed is: 1. A routing system for routing communication events comprising: at least one data queue for queuing incoming events; at least one interaction mechanism for enabling bi-directional communication with authors of events in queue; and a processor for processing events in queue according to routing rules; characterized in that authors of the communication events are solicited through the at least one interaction mechanism to make a value contribution in exchange for advancement in the data queue...

...What is claimed is: 1. A routing system for routing communication events comprising: at least one data queue for queuing incoming events; at least one interaction mechanism for enabling bi-directional communication with authors of events in queue; and a processor for processing events in queue according to routing rules; characterized in that authors of the communication events are advanced in the data queue in exchange for a value contribution made in response to a solicitation by the at least one interaction mechanism...

Basic Derwent Week: 200308...

38/5,K/4 (Item 4 from file: 350)

DI ALCG R) File 350: Derwent WPI X

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0013010896 - Drawing available

WPI ACC NO: 2003-089164/200308

XRPX Acc No: N2003-070220

Multi-media transaction message routing method in network-based communication system involves queuing request generated on receipt of respective transaction messages by integrated mechanism in queue engine  
Patent Assignee: ASPECT COMMUNICATIONS CORP (ASPE-N)

Inventor: LELE N M, MERRELL T, SI KORA S E, TAHILIANI R, YEUNG H M, YIP B L  
Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
US 6449646	B1	20020910	US 1998172182	A	19981013	200308 B

Priority Applications (no., kind, date): US 1998172182 A 19981013

#### Patent Details

Number	Kind	Lang	Pg	Dwg	Filing	Notes
US 6449646	B1	EN	20	10		

#### Alerting Abstract US B1

**NOVELTY** - The queue requests generated upon receipt of respective transaction messages by the corresponding processing systems, are queued by an integrated mechanism in a queue engine (44) and allocated to a resource. The transaction messages from the queue engine are allocated to the respective resource agents, in accordance with the rules associated with the respective agents.

**DESCRIPTION** - An INDEPENDENT CLAIM is included for computer readable medium storing multi-media transaction message routing program.

**USE** - For routing multi-media transaction message such as facsimile message, telephone call, e-mail, web chat request, also for video conferencing session, IP telephone call, text chat session, network session and non-call work event such as case tracking received by or transmitted from transaction processing system such as automatic call distributor (ACD), call center, telephone call processing device, private branch exchange (PBX), web server, facsimile server, e-mail server, switch, router and hub, in network-based communication system.

**ADVANTAGE** - The transaction messages of different types are serviced by a single resource allocation that distributes the messages from the queues to the resources.

**DESCRIPTION OF DRAWINGS** - The figure shows the block diagram of the queue engine.

44 Queue engine

**Title Terms/Index Terms/Additional Words:** MULTI; MEDIUM; TRANSACTION; MESSAGE; ROUTE; METHOD; NETWORK; BASED; COMMUNICATE; SYSTEM; QUEUE; REQUEST; GENERATE; RECEIVE; RESPECTIVE; INTEGRATE; MECHANISM; ENGINE

#### Class Codes

International Classification (Main): H04Q 003/64

US Classification, issued: 709226000, 709224000, 379265000

File Segment: EPI;

DWPI Class: T01; W01; W02

Manual Codes (EPI/S-X): T01-N01D1; T01-N02A3B; T01-S03; W01-A06E1; W01-B03A; W01-C02G3; W01-C05B1; W01-C05B2; W01-C05B4; W02-F08

**Alerting Abstract** ...video conferencing session, IP telephone call, text chat session, network session and non-call work event such as case tracking received by or transmitted from transaction processing system such as automatic call distributor (ACD), call center, telephone call processing device, private branch exchange (PBX), web server, facsimile server, e-mail server, switch, router and hub, in network-based...

#### Original Publication Data by Authority

#### Original Abstracts:

...example a telephone call, e-mail, web chat request, video conferencing session, or non-call event, includes a queue engine and a transaction message router. The queue engine provides an integrated mechanism for queuing transaction messages of varying transaction types...

Basic Derwent Week: 200308

38/5, K/5 (Item 5 from file: 350)

DI ALCO (R) File 350: Derwent WPI X

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0012808485 - Drawing available

WPI Acc No: 2002-665557/200271

XRPX Acc No: N2002-526533

Pre-routing software system has module that determines pre-treatment of

**received incoming events based on set rules**

Patent Assignee: GENESYS TELECOM LAB INC (GENE-N); PETROVYKH Y (PETR-I)

Inventor: PETROVYKH Y

**Patent Family** (3 patents, 32 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
US 20020087648	A1	20020704	US 1997795680	A	19970206	200271 B
			US 1997998268	A	19971224	
			US 2000599045	A	20000621	
			US 200279328	A	20020219	
EP 1337079	A1	20030820	EP 20032575	A	20030207	200362 E
US 7272627	B2	20070918	US 1997795680	A	19970206	200763 E
			US 1997998268	A	19971224	
			US 2000599045	A	20000621	
			US 200279328	A	20020219	

Priority Applications (no., kind, date): US 1997795680 A 19970206; US 1997998268 A 19971224; US 2000599045 A 20000621; US 200279328 A 20020219

**Alerting Abstract** US A1

NOVELTY - The network interfaces receive the incoming events and an engine parses the electronic messages and documents according to the set rules. A module determines a pre-treatment of the received events based on the set rules.

DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

1. Pre- routing server; and
2. Network events pre- routing method.

USE - For treating incoming network events according to important event in communication center network and the system is integrated with existing routing and message treatment systems e.g. e-mail routing system and IP voice/line-message routing system.

ADVANTAGE - Uses minimum parsing and rule comparison in order to determine pre- routing options for events effectively.

DESCRIPTION OF DRAWINGS - The figure shows the flowchart illustrating server adapter process in e-mail processing center.

**Title Terms/Index Terms/Additional Words:** PRE; ROUTE; SOFTWARE; SYSTEM; MODULE; DETERMINE; TREAT; RECEIVE; INCOMING; EVENT; BASED; SET; RULE

**Class Codes**

International Classification (+ Attributes)

IPC + Level Value Position Status Version

US Classification, issued: 709206000, 709201000, 709238000, 709240000, 379265020

File Segment: EPI;

DWPI Class: T01; W01

Manual Codes (EPI/S-X): T01-N02A3B; T01-N02B; W01-A06E1; W01-C05B4A

**Original Titles:**

...System apparatus and method for pre- routing network events

...

...System and apparatus for pre- routing network events

...

...System and apparatus for pre- routing network events

**Alerting Abstract** ...Pre- routing server; and Network events pre- routing method...

...ADVANTAGE - Uses minimum parsing and rule comparison in order to determine pre- routing options for events effectively...

**Original Publication Data by Authority**

**Original Abstracts:**

A pre- routing software system for treating incoming network events according to **event importance** prior to agent-level routing in a communication center network is disclosed. The system includes at least one network interface...

...and documents, at least one communication interface for enabling communication with connected routing, queuing, and **automated response** systems, and a determination module for determining pre-treatment of received events. In preferred application...

...A pre- routing software system for treating incoming network events according to **event importance** prior to agent-level routing in a communication center network is disclosed. The system includes at least one network interface...

...and documents, at least one communication interface for enabling communication with connected routing, queuing, and **automated response** systems, and a determination module for determining pre-treatment of received events. In preferred application...

...A pre- routing software system for treating incoming network events according to **event importance** prior to agent-level routing in a communication center network is disclosed. The system includes at least one network interface...

...and documents, at least one communication interface for enabling communication with connected routing, queuing, and **automated response** systems, and a determination module for determining pre-treatment of received events. In preferred application...

#### Claims:

A pre- routing software system for treating incoming network events according to **event importance** prior to agent-level routing in a communication center network comprising: at least one network interface for receiving incoming events...

...and documents; at least one communication interface for enabling communication with connected routing, queuing, and **automated response** systems; and a determination module for determining pre-treatment of received events; characterized in that...

...What is claimed is: <b>1</b>. A pre- routing software system for treating incoming network events according to **event importance** prior to agent-level routing in a communication center network comprising: at least one network interface for receiving incoming events...

...and documents; at least one communication interface for enabling communication with connected routing, queuing, and **automated response** systems; and a determination module for determining pre-treatment of received events; characterized in that...

...characterized in that according to the result of parsing communications are either terminated, routed to **automated response** systems, or routed to agents having appropriate skills to respond...  
Basic Derwent Week: 200271...

38/5, K/6 (Item 6 from file: 350)

DI ALQ/R File 350: Derwent WPI X

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0010385357 - Drawing available

WPI ACC NO: 2000-195714/200017

XRFX Acc No: N2000-144754

Investment research automation software for providing dynamic context

switching through multiple investment analysis tools

Patent Assignee: GENESYS TELECOM LAB INC (GENE-N); HARVEST TECHNOLOGY INC

(HARV-N); SHTI VELMAN Y (SHTI-I)

Inventor: CHOY H C; DIRIK A; MASON R K V; SHTI VELMAN Y

Patent Family (4 patents, 84 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
WO 2000008581	A1	20000217	WO 1999US17644	A	19990803	200017 B



AU 199953352	A	20000228	AU 199953352	A	19990803	200030	E
US 20050002516	A1	20050106	US 1998128273	A	19980803	200504	E
			US 1999438675	A	19991112		
			US 2004901620	A	20040728		
US 7016485	B2	20060321	US 1998128273	A	19980803	200621	E
			US 1999438675	A	19991112		
			US 2004901620	A	20040728		

Priority Applications (no., kind, date): US 1998128273 A 19980803; US 1999438675 A 19991112; US 2004901620 A 20040728

#### Alerting Abstract WD A1

**NOVELTY** - The investment tools (122) display predefined type of investment data specific to the investment tool. Each investment tool has a computer executable process that receives data context from a navigator (102), retrieving the type of data specific to the investment tool and defined by the data context, and displays the retrieved data in one user interface template selected by a user.

**DESCRIPTION** - Each investment tool also includes the user interface template for selectively displaying investment data of a predetermined type. The navigator includes a user interface (100) for displaying a listing of domains (103). Each domain includes financial instruments. The navigator also has a computer executable process for receiving a user selection of at least one displayed domain. The computer executable process of the navigator creates data context corresponding to the financial instrument within the user selection.

An **INDEPENDENT CLAIM** is also included a computer implemented method for organizing and presenting investment data.

**USE** - For providing dynamic context switching through multiple investment analysis tools and integrated creation, storage and retrieval of investment recommendations.

**ADVANTAGE** - Reduces the time necessary to review investment information. Obtains a software that adapts to the workflow of an investment professional. Provides facilities for documentation of investment decisions in the context of investment data.

**DESCRIPTION OF DRAWINGS** - The figure shows the user interface of the investment research automation software.

- 100 User interface
- 102 Navigator
- 103 Domains
- 122 Investment tools

**Title Terms/Index Terms/Additional Words:** INVESTMENT; RESEARCH; AUTOMATIC; SOFTWARE; DYNAMIC; CONTEXT; SWITCH; THROUGH; MULTIPLE; ANALYSE; TOOL

#### Class Codes

International Classification (+ Attributes)

IPC + Level	Value	Position	Status	Version
G06Q 0040/00	A	I	R	20060101
H04M 0003/00	A	I	F	20060101
H04M 0003/51	A	I	R	20060101
H04M 0003/523	A	I	R	20060101
G06Q 0040/00	C	I	R	20060101
H04M 0003/00	C	I	L	20060101
H04M 0003/50	C	I	R	20060101

US Classification, Issued: 379309000, 379211010, 379266040, 379266040, 379266070, 379309000

File Segment: EPI;

DWPI Class: T01

Manual Codes (EPI/S-X): T01-J05A1; T01-J12B; T01-S03

#### Original Titles:

Emergency call load management for call centers

...

...Emergency call load management for call centers

#### Original Publication Data by Authority

#### Original Abstracts:

An emergency call load handling system in a call network has an interactive voice response (IVR) unit associated with a switching apparatus to which calls may be diverted in special conditions, such as during emergencies...

...a call load threshold experienced by the switching apparatus or for a specific destination. The IVR unit in some cases negotiates with callers for priority to further route calls, and may play pre-recorded messages. Low priority calls are typically disposed of to for fire stations, hospitals, government emergency handling centers and...

...cases rules may be amended in real time by use of data network connections between call centers and the SCPs involved.

...

...An emergency call load handling system in a call network has an interactive voice response (IVR) unit associated with a switching apparatus to which calls may be diverted in special conditions, such as during emergencies or disasters when calls to...

...a call load threshold experienced by the switching apparatus or for a specific destination. The IVR unit in some cases negotiates with callers for priority to further route calls, and may play pre-recorded messages. Low priority calls are typically disposed of to for fire stations, hospitals, government emergency handling centers and the like. In some cases rules may be amended in real time by use of data network connections between call centers and the SCPs involved.

#### Claims:

...network-level transaction load-handling system, comprising: routing intelligence in a network for receiving, processing, prioritizing and routing incoming transactions to a destination; and at least one intelligent peripheral in the network communicating with the routing intelligence for negotiating with a transaction initiator to ascertain priority of the transaction; characterized in that the routing intelligence monitors transaction loading for individual destinations, and transactions are prioritized or otherwise selectively processed using specific programmed rules based upon a specific input provided to the routing unit with or following the transaction, and selected transactions determined to have priority based upon the input and programmed rules are routed to their original destinations, and further characterized in that transaction selection and prioritization may be at least partly based on negotiation with the transaction initiator by the at least one network-level intelligent peripheral. ...Basic Derwent Week: 1999WD US0017644

38/5,K/7 (Item 7 from file: 350)

DI ALOC(R) File 350: Derwent WPI X

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0010370639 - Drawing available

WPI ACC NO: 2000-686761/200067

Related WPI Acc No: 1999-540431; 2000-271691; 2000-317246; 2000-328520;

2000-365206; 2000-365812; 2000-365621; 2000-411438; 2000-422526;

2000-482374; 2000-490708; 2000-549337; 2001-283696; 2001-408324;

2001-432682; 2001-537686; 2002-240188

XRPX Acc No: N2000-507811

Client self-help system in multimedia communication center, updates self-help wizard presented in graphic interface automatically in available information based on client transaction history with enterprise

Patent Assignee: BECK C M (BECK-I); BERKE J M (BERK-I); GENESYS TELECOM

LAB INC (GENE-N); JOHNSTONE J A (JOHN-I); KNUFF C D (KNUFF-I); MACLEOD

B C C (MACL-I); MACLEOD BECK C C (BECK-I); M TOHELL R M (M TC-I);

POWERS J K (POWE-I); SI DELL M F (SI DE-I)

Inventor: BECK C M; BERKE J M; JOHNSTONE J A; KNUFF C D; MACLEOD B C C;

MACLEOD BECK C C; M TOHELL R M; POWERS J K; SI DELL M F

Patent Family (15 patents, 89 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
WD 2000049482	A2	20000824	WD 2000US785	A	20000112	2000067 B

AU 200034708	A	20000904	AU 200034708	A	20000112	200103	E
US 20010025309	A1	20010927	US 1998151429	A	19980911	200159	E
			US 1999253554	A	19990219		
US 6332154	B2	20011218	US 1999253554	A	19990219	200205	E
EP 1163564	A2	20011219	EP 2000913226	A	20000112	200206	E
			WO 2000US785	A	20000112		
US 20020055853	A1	20020509	US 1998151429	A	19980911	200235	E
			US 1998183395	A	19981029		

#### Alerting Abstract WO A2

**NOVELTY** - An operating system includes outward facing communication interface for accepting communication from clients and for presenting a display for connected client. An interactive self-help wizard presented in graphic interface in the display and configured to selected client is periodically and automatically updated in available information according to client transaction history with the enterprise.

**DESCRIPTION** - A media selection interface is presented in graphic interface, by which the connected client may select particular media for receiving help and indicate the nature of help desired. An **INDEPENDENT CLAIM** is also included for self directed and providing method to clients.

**USE** - For providing media independent self help wizard modules presented as part of customer interface associated with multimedia communication center.

**ADVANTAGE** - Allows customer to solve specific product or service related problems without taxing enterprise resource by providing self help wizard through which connected resources such as interactive **voice response** units ( **IVR** ) and other automated services can be accessible.

**DESCRIPTION OF DRAWINGS** - The figure shows the multimedia communication center.

**Title Terms/Index Terms/Additional Words:** CLIENT; SELF; HELP; SYSTEM COMMUNICATE; UPDATE; PRESENT; GRAPHIC; INTERFACE; AUTOMATIC; AVAILABLE; INFORMATION; BASED; TRANSACTION; HISTORY

#### Class Codes

International Classification (Main): G06F-017/60  
International Classification (+ Attributes)  
IPC + Level Value Position Status Version

File Segment: EngPI; EPI;

DWPI Class: T01; P85

Manual Codes (EPI/S-X): T01-C02B1; T01-F05G5; T01-J11C2; T01-J30

**Alerting Abstract** ...taxing enterprise resource by providing self help wizard through which connected resources such as interactive **voice response** units ( **IVR** ) and other automated services can be accessible...

**Original Publication Data by Authority**

#### Original Abstracts:

In a multimedia call center (MCC) operating through an operating system a client-specific self-help wizard is provided for active clients and updated...

...or IP address listed for the client, and interactivity will then be through an interactive **voice response** unit. Help information specific to a client is updated in the client's wizard periodically according to ongoing transaction...

...In a multimedia call center (MCC) operating through an operating system a client-specific self-help wizard is provided for active clients and updated periodically with information related to...

...or IP address listed for the client, and interactivity will then be through an interactive **voice response** unit. Help information specific to a client is updated in the client's wizard periodically according to ongoing transaction history with the MCC. The...

...In a multimedia call center (MCC) operating through an operating system a client-specific self-help wizard is provided for active clients and updated periodically with information related to client transaction history with the...

38/5,K/8 (Item 8 from file: 350)  
 DI ALCOG R File 350: Derwent WPI X  
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0009969320 - Drawing available  
 WPI ACC NO: 2000-271691/200023  
 Related WPI Acc No: 1999-540431; 2000-317246; 2000-328520; 2000-365206;  
 2000-365812; 2000-365821; 2000-411438; 2000-422526; 2000-482374;  
 2000-490708; 2000-549337; 2000-686761; 2001-283696; 2001-408324;  
 2001-432682; 2001-537686; 2002-240188

XRPX Acc No: N2000-203431

Enterprise-hosted multimedia telecommunication center, has processing layer  
 that processes client transaction request to establish client  
 communication, according to enterprise rules

Patent Assignee: GENESYS TELECOM LAB INC (GENE-N)

Inventor: BECK C C M, BERKE J M, JOHNSTONE J, JOHNSTONE J A, KNUFF C D;  
 MCHILL R M, POWERS J K, SIDELL M F

Patent Family (9 patents, 87 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
WO 2000016523	A1	20000323	WO 1999US20259	A	19990902	200023	B
AU 199958070	A	20000403	AU 199958070	A	19990902	200034	E
US 6212178	B1	20010403	US 1998151564	A	19980911	200120	E
			US 1998151710	A	19980911		
US 6230197	B1	20010508	US 1998151429	A	19980911	200128	E
			US 1998151564	A	19980911		
			US 1998151710	A	19980911		
BR 199913622	A	20010522	BR 199913622	A	19990902	200132	E
			WO 1999US20259	A	19990902		
EP 1114543	A1	20010711	EP 199945479	A	19990902	200140	E
			WO 1999US20259	A	19990902		
CN 1354942	A	20020619	CN 1999811995	A	19990902	200263	E
AU 754238	B	20021107	AU 199958070	A	19990902	200302	E
JP 2003507908	W	20030225	WO 1999US20259	A	19990902	200317	E
			JP 2000570941	A	19990902		

Priority Applications (no., kind, date): US 1998151710 A 19980911; US  
 1998151429 A 19980911; US 1998151564 A 19980911

#### Patent Details

Number	Kind	Lang	Pg	Dwg	Filing Notes
WO 2000016523	A1	EN	42	6	
National Designated States, Original:					AE AL AM AT AU AZ BA BB BG BR BY CA
					CH CN CR CU CZ DE DK DM EE ES FI
					GB GD GE GH GM HR HU ID IL IN IS JP KE
					KG KP KR KZ LC LK LR LS LT LU LV
					MD MG MK MN MW MX NO NZ PL PT RO RU SD
					SE SG SI SK SL TJ TM TR TT UA UG
					UZ VN YU ZA ZW
Regional Designated States, Original:					AT BE CH CY DE DK EA ES FI FR GB GH
					GM GR IE IT KE LS LU MC MW NL OA
					PT SD SE SL SZ UG ZW
AU 199958070	A	EN			Based on CPI patent WO 2000016523
US 6212178	B1	EN			C-1-P of application US 1998151564
					C-1-P of patent US 6108711
US 6230197	B1	EN			C-1-P of application US 1998151564
					C-1-P of application US 1998151710
					C-1-P of patent US 6108711
					C-1-P of patent US 6212178
BR 199913622	A	PT			PCT Application WO 1999US20259
					Based on CPI patent WO 2000016523
EP 1114543	A1	EN			PCT Application WO 1999US20259
					Based on CPI patent WO 2000016523
Regional Designated States, Original:					AL AT BE CH CY DE DK ES FI FR GB GR
					IE IT LI LT LU LV MC MK NL PT RO SE SI
AU 754238	B	EN			Previously issued patent AU 9958070
JP 2003507908	W	JA	49		Based on CPI patent WO 2000016523
					PCT Application WO 1999US20259
					Based on CPI patent WO 2000016523

#### Alerting Abstract WO A1

NOVELTY - A client-facing media processing layer receives  
 client-initiated transaction request and links clients and enterprise

resources by several media types. A processing layer processes client transaction request to establish client communication, according to the enterprise rules.

**DESCRIPTION** - The center (17) restricts all contacts to the principal media interactive interface (61). The interface is capable of identifying the clients. The clients are offered communication choices, after their identification. The principal media interactive interface is an interactive **voice - response (IVR)** unit or the web page. An **INDEPENDENT CLAIM** is also included for the method for controlling client media access in the enterprise-hosted telecommunication center.

**USE** - Enterprise-hosted multimedia telecommunication center connected to internet or other digital network such as company intranet.

**ADVANTAGE** - Enables utilizing agent's time according to enterprise rules within automated environment efficiently. Enables initialization of customer dialog via predictive dialing, e-mail push, automated recorded messages, by using single set of outbound tool, reliably.

**DESCRIPTION OF DRAWINGS** - The figure shows multimedia communication center enhanced with network operating system

17 Center

61 Media interactive interface

**Title Terms/Index Terms/Additional Words:** TELECOMMUNICATION; PROCESS; LAYER; CLIENT; TRANSACTION; REQUEST; ESTABLISH; COMMUNICATE; ACCORD; RULE

#### Class Codes

International Classification (Main): H04M 003/42

International Classification (+ Attributes)

IPC + Level Value Position Status Version

US Classification, Issued: 370352000, 379088040, 709223000, 709238000,

709218000, 709217000, 379265000, 379201000, 455403000, 455554000

File Segment: EPI;

DWPI Class: W01

Manual Codes (EPI/S-X): W01-A06G3; W01-C02A7; W01-C02G3

#### Original Titles:

...METHOD AND APPARATUS FOR SELECTIVELY PRESENTING MEDIA-OPTIONS TO CLIENTS OF A MULTIMEDIA CALL CENTER

...

...Method and apparatus for selectively presenting media-options to clients of a multimedia call center .

...

...METHOD AND APPARATUS FOR SELECTIVELY PRESENTING MEDIA-OPTIONS TO CLIENTS OF A MULTIMEDIA CALL CENTER

**Alerting Abstract** ...are offered communication choices, after their identification. The principal media interactive interface is an interactive **voice - response (IVR)** unit or the web page. An **INDEPENDENT CLAIM** is also included for the method for...

#### Original Publication Data by Authority

#### Original Abstracts:

...A multimedia call center includes facility for storing copies of transactions associated with the call center in a data repository, relating the transactions according to specific criteria, and an interactive interface for a user to access...

...string of identifiers representing the files, and to play the files, thereby reviewing the actual transactions. In a preferred embodiment text versions of non-text events may be prepared and related to the non-text stored files in a manner that the related text files may...

#### Claims:

...A method for receiving and routing multimedia communication events in a multimedia-capable call center, and making recordings of the events available to users, comprising steps of:(a) storing both text-based and non-text-based events involving the call center in a data repository;(b) preparing a text version of non-text communication events;(c) storing the text versions in the data repository related to the non-text versions;(d) receiving notification of...

...non-text event by the user and the text-based version of the non-text event is mirrored and routed to the agent along with notification of the incoming event : (e) relating the stored files in one or more serial strings according to relational criteria; and (f) providing an interactive display interface on a computer video monitor, the interface adapted for displaying identifiers of the stored files, the identifiers...

...Basic Derwent Week: 1999VD-US0020259

38/5, K/9 (Item 9 from file: 350)

DI ALQ R) File 350: Derwent WPI X

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0009728742 - Drawing available

WPI ACC NO: 2000-013745/ 200001

XRPX Acc No: N2000-010619

**Automatic transaction processing system for order processing from customer**

Patent Assignee: MARCAM SOLUTIONS INC (MARC-N)

Inventor: DALTON J T; DRUMMOND L; HOWELLS R; O'BRIEN M; RYAN W; TRIGG J

**Patent Family** (1 patents, 20 countries)

Patent Application

Number	Kind	Date	Number	Kind	Date	Update
WD 1999057664	A1	19991111	WD 1999US9017	A	19990426	200001 B

Priority Applications (no., kind, date): US 1998108115 A 19980630; US 199884201 P 19980504; US 1999248794 A 19990212

#### Patent Details

Number	Kind	Lang	Pg	Dwg	Filing Notes
WD 1999057664	A1	EN	231	35	

National Designated States, Original: CA JP

Regional Designated States, Original: AT BE CH CY DE DK ES FI FR GB GR IE

IT LU MC NL PT SE

#### Alerting Abstract WD A1

NOVELTY - An event generator (18) in communication with set of transaction objects (16), generates an event notification indicating that an event has occurred. An event processor (24) generates an action object specifying one or more actions to be executed, in connection with the business transaction, based on event notification. An action server (28) executes the action specified by the action object.

DESCRIPTION - An INDEPENDENT CLAIM is also included for automated transaction processing method.

USE - For automatic handling order processing from customers.

ADVANTAGE - Facilitates order taking, invoicing and shipping procedures on enterprise-wide basis. Can be readily customized to meet user's needs as initially installed. Provides processing system that can be operated on a wide variety of digital data processing system from mainframes to workstations and to personal computers.

DESCRIPTION OF DRAWINGS - The figure shows the block diagram of the automated transaction processing system

16 Transaction objects

18 Event generator

24 Event processor

28 Action server

Title Terms/Index Terms/Additional Words: AUTOMATIC; TRANSACTION; PROCESS; SYSTEM; ORDER; CUSTOMER

#### Class Codes

International Classification (Main): G06F-017/60

File Segment: EPI;

DWPI Class: T01

Manual Codes (EPI/S-X): T01-J05A

...NOVELTY - An event generator (18) in communication with set of transaction objects (16), generates an event notification indicating that an event has occurred. An event processor (24) generates an action object specifying one or more actions to be executed, in connection with the business transaction, based on event notification. An action server (28) executes the action specified by the action object.

# Original Publication Data by Authority

## Original Abstracts:

Systems and methods for automated transaction processing utilize modifiable tables that define significant events in transaction flow and that define actions to be taken in response to those events. In addition to facilitating customization of the automated processing actions and sequences, systems and methods...

...  
...

38/5, K/10 (Item 10 from file: 350)

DI ALCO R/ File 350: Derwent WPI X

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0009715109 - Drawing available

WPI ACC NO: 1999-622488/ 199954

XRPX Acc No: N1999-459374

Transaction prioritization method e.g. for allocating servers

Patent Assignee: AVAYA TECHNOLOGY CORP (AVAY-N); MOSAIX INC (MOSA-N)

Inventor: DONAGHUE N J

Patent Family (5 patents, 3 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
GB 2338093	A	19991208	GB 19995212	A	19990305	199954	B
CA 2264464	A1	19990906	CA 2264464	A	19990305	200006	E
US 6226377	B1	20010501	US 199877157	P	19980306	200126	E
			US 199869848	A	19980603		
GB 2338093	B	20021218				200307	E
CA 2264464	C	20060124	CA 2264464	A	19990305	200612	E

Priority Applications (no., kind, date): US 199877157 P 19980306; US 199869848 A 19980603

## Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
GB 2338093	A	EN	51	9	
CA 2264464	A1	EN			
US 6226377	B1	EN			Related to Provisional US 199877157
CA 2264464	C	EN			

## Alerting Abstract GB A

NOVELTY - The method identifies transaction servers as and when they become available to process transactions. For each server, and for each priority level (401) within that server, it is determined (402) whether assigning a transaction server to any transaction type of a specific priority level is necessary to meet the level goal for that type. If so, (403) the identified server is assigned to it. After the identified server has completed this task, it is re-identified as being available to process transactions.

DESCRIPTION - If the server is not assigned, the method moves onto the next priority level.

INDEPENDENT CLAIMS are included for:

1. an apparatus for distributing transaction servers to process transactions of differing types;
2. a computer memory which contains a transaction server allocation data structure; and
3. a computer-readable medium containing program instructions for transaction allocation.

USE - For allocating transaction servers resources, especially in telephonic call centers.

ADVANTAGE - More effective management of call server resources, by routing the tasks as they come in to the first available server, instead of allocating specific servers.

DESCRIPTION OF DRAWINGS - The figure shown is a flow diagram of the step necessary to assign a server to one of the priority levels.

401 Move from highest priority level to lowest  
 402 Offer server for level to transaction type  
 403 Is the offer accepted  
 404 Offer next priority level

**Title Terms/Index Terms/Additional Words:** TRANSACTION; METHOD; ALLOCATE;  
 SERVER

#### Class Codes

International Classification (+ Attributes)

IPC + Level Value Position Status Version

G06F-0013/10 A I L R 20060101

G06F-0009/50 A I R 20060101

H04L-0012/04 A I F R 20060101

H04Q-0003/64 A I L R 20060101

G06F-0013/10 C I L R 20060101

G06F-0009/46 C I R 20060101

H04L-0012/04 C I L R 20060101

H04Q-0003/64 C I L R 20060101

US Classification, Issued: 379265000, 379266000, 709101000, 709201000

File Segment: EPI;

DWPI Class: T01

Manual Codes (EPI/S-X): T01-H01B3; T01-H07C5S; T01-H07P; T01-J05A2; T01-S03

Transaction prioritization method e.g. for allocating servers

#### Original Titles:

Prioritized transaction server allocation.

**Alerting Abstract** ... NOVELTY - The method identifies transaction servers as and when they become available to process transactions. For each server, and for each priority level (401) within that server, it is determined (402) whether assigning a transaction server to any transaction type of a specific priority level is necessary to meet the level goal for that type. If so, (403) the...

... USE - For allocating transaction servers resources, especially in telephonic call centers.

...

... ADVANTAGE - More effective management of call server resources, by routing the tasks as they come in to the first available server, instead of allocating specific servers...

... OF DRAWINGS - The figure shown is a flow diagram of the step necessary to assign a server to one of the priority levels

Original Publication Data by Authority

#### Original Abstracts:

... distributing transaction servers to process transactions of a number of different types is provided. The transaction types are organized into two or more priority levels ordered from highest to lowest. Each priority level has one or more transaction types. In the facility, a service level goal attribution system attributes a service level goal...

#### Claims:

... system for distributing transaction servers to process transactions of a plurality of different types, the transaction types being organized into a plurality of priority levels ordered from highest to lowest, each priority level having one or more transaction types, each transaction type further having a service level goal reflecting the level of service sought for transactions...

... they become available to process transactions; for each identified transaction server, in response to the identification of the transaction server; for each priority level, from the highest priority level to the lowest priority level, until the identified transaction server is assigned to process a transaction of a selected type; determining whether assigning the identified transaction server to a transaction of any of the transaction types of the priority level is necessary to meet





**DESCRIPTION** - The dialog manager system uses an inheritance hierarchy of task-types or services. The hierarchy is used by the dialog manager to generate a semantically consistent combination of call or task-types in the form of Boolean formula. The Boolean formula is used by the dialog manager to determine if it is necessary to ask clarifying questions, ask for further information required to complete the transaction and determine in what order to ask the questions. The formula is obtained through a Boolean formula minimization process, and always yields a minimum and consistent combination of call or task types. **INDEPENDENT CLAIMS** are included for a system for interpreting a request and interacting with a user in order to implement one or more task objectives; a system for interpreting a caller's request in conversation with a caller in order to implement **call routing** objectives.

**USE** - Interpreting request from user and implementing one or more task objectives.

**ADVANTAGE** - Dialog manager infers user's attention, detects presence of ambiguities based on task knowledge, constructs semantically consistent set of user's intention, and logically implements the users objectives.

**DESCRIPTION OF DRAWINGS** - The drawing shows an example of call types and their associated attributes.

- 310 Spoken language understanding module
- 320 Inheritance hierarchy
- 330 Dialog manager

**Title Terms/Index Terms/Additional Words:** GENERATE; CONSISTENT; INPUT; DIALOGUE; MANAGE

#### Class Codes

International Classification (Main): G06F-009/00

(Additional/Secondary): G11C-011/00

International Classification (+ Attributes)

IPC + Level Value Position Status Version

G06F-0017/27 A I R 20060101

G06F-0017/28 A I R 20060101

G06Q-0030/00 A I F B 20060101

G06Q-0030/00 A I F 20060101

G06Q-0030/00 A I R 20060101

G10L-0015/18 A I L B 20060101

G10L-0015/18 A I L 20060101

G10L-0015/18 A I R 20060101

G10L-0015/22 A I L B 20060101

G10L-0015/22 A I L 20060101

G10L-0015/26 A I L B 20060101

G10L-0015/26 A I L 20060101

G06F-0017/27 C I R 20060101

G06F-0017/28 C I R 20060101

G06Q-0030/00 C I F B 20060101

G06Q-0030/00 C I L B 20060101

G06Q-0030/00 C I R 20060101

G10L-0015/00 C I L B 20060101

G10L-0015/00 C I L 20060101

G10L-0015/00 C I R 20060101

G06Q-0030/00 C I B 20060101

G10L-0015/00 C I B 20060101

US Classification, Issued: 704251000, 379088010

File Segment: EngPI; EPI;

DWPI Class: T01; P86

Manual Codes (EPI/S-X): T01-J05A; T01-J11A

**Alerting Abstract** ...for interpreting a caller's request in conversation with a caller in order to implement **call routing** objectives...

**Original Publication Data by Authority**

#### Aims:

...task objectives, the hierarchy including a plurality of categories of task objectives, each of the **task** objectives being assigned a different priority;<br> identifying one or more of the **task** objectives from the user's input;<br> determining an order of implementation of the identified task...

...task objectives, the hierarchy including a plurality of categories of task objectives, each of the task objectives being assigned a different priority; identifying one or more of the task objectives from the user's input; <b>characterized by</b> assigning a score to each of the...

...speech and engaging in conversation with a caller in order to implement one or more call routing objectives, comprising: an inheritance hierarchy module that establishes a hierarchy of call routing objectives, the hierarchy including a plurality of categories of call routing objectives, each of the call routing objectives being assigned a different priority; a Spoken Language Understanding Module that identifies one or more of the call routing objectives from the caller's speech; and a dialog manager that determines an order of implementation of the identified call routing objectives on the priorities assigned to each of the identified call routing objectives.  
Basic Derwent Week: 199918

38/5, K/12 (Item 12 from file: 350)  
DI ALCG(R) File 350: Derwent WPI X  
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0007876154 - Drawing available  
WPI ACC NO: 1996-507429/ 199651  
Related WPI Acc No: 1998-582989  
XRPX Acc No: N1996-427584

Automatic call distribution system distributing transaction between agents at call centre - compares set of skill requirement data for transaction with skill data for agent telephones and selects one to process transaction, switching circuit responds to dispatcher to switch transaction to selected telephone

Patent Assignee: IBM CORP (IBM); INT BUSINESS MACHINES CORP (IBM); SIEMENS BUSINESS COMMUNICATION SYSTEMS (SIE); SIEMENS ROLM COMMUNICATIONS INC (SIE); SIEMENS INFORMATION & COMMUNICATIONS NET (SIE)

Inventor: BERKSON S P; BROOKS L M; BROOKS N S; FRYER P D; HEREL C R; KAUFMAN G S

Patent Family (6 patents, 8 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
EP 740450	A2	19961030	EP 1996302807	A	19960422	199651	B
JP 8321885	A	19961203	JP 1996102983	A	19960424	199707	
JP 3485223	B2	20040113	JP 1996102983	A	19960424	200406	
EP 740450	B1	20060614	EP 1996302807	A	19960422	200643	
DE 69636239	E	20060727	DE 69636239	A	19960422	200651	E
			EP 1996302807	A	19960422		
DE 69636239	T2	20070510	DE 69636239	A	19960422	200732	E
			EP 1996302807	A	19960422		

Priority Applications (no., kind, date): US 1995427546 A 19950424; EP 1996302807 A 19960422

#### Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
EP 740450	A2	EN	55	11	
Regional Designated States, Original:					AT CH DE FR GB IT LI
JP 8321885	A	JA	54		
JP 3485223	B2	JA	54		Previously issued patent JP 08321885
EP 740450	B1	EN			
Regional Designated States, Original:					AT CH DE FR GB IT LI
DE 69636239	E	DE			Application EP 1996302807
					Based on CPI patent EP 740450
DE 69636239	T2	DE			Application EP 1996302807
					Based on CPI patent EP 740450

#### Alerting Abstract EP A2

The automatic call distribution system (100) has a transaction queue storing a set of skill requirement data for the transaction. A skills inventory database stores a set of skill data for each of several agents. A transaction dispatcher compares the set of skill requirement data for

the transaction with the skill data for the agents (152 to 156) and selects one of the agents for processing the transaction. A switching circuit (120) responds to the dispatcher to switch the transaction to the selected agent.

**ADVANTAGE** - Switch keeps track of exactly how long each agent has been idly waiting for their telephone to ring with inbound transaction, and ensures efficient utilisation of agents. Reduces amount of **call handling** by under-skilled and over-skilled agents.

**Title Terms/Index Terms/Additional Words:** AUTOMATIC; CALL; DISTRIBUTE; SYSTEM TRANSACTION; AGENT; CENTRE; COMPARE; SET; SKILL; REQUIRE; DATA; TELEPHONE; SELECT; ONE; PROCESS; SWITCH; REQUEST; RESPOND; DISPATCH

#### Class Codes

International Classification (+ Attributes)

PC	Level	Value	Position	Status	Version
H04M	0003/42	A	I	F	R 20060101
H04M	0003/493	A	N		R 20060101
H04M	0003/50	A	I	F	B 20060101
H04M	0003/50	A	I	F	20060101
H04M	0003/51	A	I		R 20060101
H04M	0003/523	A	I		R 20060101
H04M	0003/60	A	I	L	R 20060101
H04M	0007/00	A	N		R 20060101
H04Q	0003/58	A	I	L	R 20060101
H04Q	0003/66	A	I	L	B 20060101
H04Q	0003/66	A	I	L	20060101
H04M	0003/42	C	I	F	R 20060101
H04M	0003/487	C	N		R 20060101
H04M	0003/50	C	I	L	B 20060101
H04M	0003/50	C	I	L	R 20060101
H04M	0003/60	C	I	L	R 20060101
H04M	0007/00	C	N		R 20060101
H04Q	0003/58	C	I	L	R 20060101
H04Q	0003/64	C	I	L	B 20060101
H04Q	0003/64	C	I	L	20060101
H04M	0003/50	C	I		B 20060101
H04Q	0003/64	C	I		B 20060101

File Segment: EPI;

DWPI Class: T01; W01

Manual Codes (EPI/S-X): T01-H07C; W01-B02A1; W01-Q02A7; W01-Q02B2; W01-Q02B4

**Automatic call distribution system distributing transaction between agents at call centre -**

#### Original Titles:

...Method and apparatus for skill-based routing in a call center  
...

...Method and apparatus for skill-based routing in a call center  
...

...METHOD AND APPARATUS FOR SKILL-BASED IN CALL CENTER

**Alerting Abstract** ...The automatic call distribution system (100) has a transaction queue storing a set of skill requirement data for the...

...telephone to ring with inbound transaction, and ensures efficient utilisation of agents. Reduces amount of **call handling** by under-skilled and over-skilled agents.

#### Original Publication Data by Authority

#### Original Abstracts:

An automatic call distribution (ACD) system has a **transaction queue** for storing data indicating the skills and the levels of these skills that are required to **process** the calls at a **call center**. The ACD system also has a skills inventory database for storing data indicating the skills and the skill levels of each of the agents at the **call center**. The skills inventory database also stores data indicating the preferences and the preference levels of the **call center management** to have specific

agents process calls with specific skill requirement levels. The ACD system compares...

...by a call with the skill levels and/or preference levels of available agents and **distributes** the **call** to the available agent that has the best skill and/or preference match. A match...

...is the least overqualified agent. A match is best with respect to preferences if the **call center management** most prefers that the agent **handle** the **call**. The **call center management** controls whether the ACD system considers skill matches, preference matches, or both.

#### Claims:

1. An automatic call distribution system for distributing a transaction between a plurality of agents at a **call center**, said automatic call distribution system comprising: a transaction queue, said transaction queue storing a set of skill requirement data...

...An automatic call distribution system (110) for distributing a transaction between plurality of agents (152, 154, 156, 158) at a **call center**, said automatic call distribution system (110) comprising: a transaction queue (202), for storing a set of skill requirement data...  
Basic Derwent Week: 199651

38/5, K/13 (Item 13 from file: 350)

DI ALCO R) File 350: Derwent WPI X

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0007433200 - Drawing available  
WPI ACC NO: 1996-041790/ 199605

XRPX Acc. No: N1996-035035

Inter-process communication in micro-kernel architecture data processing system contg. inter-process communication subsystem - loading micro-kernel into memory, forming two tasks, sending 1st task and message indicating that data is temporary to sub-system storing data in buffer area and making buffer area available for storage when reply from 2nd task is received

Patent Assignee: IBM CORP (IBM); INT BUSINESS MACHINES CORP (IBM)  
Inventor: FARUQI A B; GREEN J W JAMES M M; MAGEE J M YOUNG/NORTH C D  
Patent Family (2 patents, 4 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
EP 689138	A2	19951227	EP 1995304172	A	19950616	199605 B
JP 8022395	A	19960123	JP 1995154371	A	19950621	199613 E

Priority Applications (no., kind, date): US 1994263633 A 19940622

#### Patent Details

Number	Kind	Lang	Pg	Dwg	Filing Notes
EP 689138	A2	EN	76	31	
Regional Designated States	Original	DE FR GB			
JP 8022395	A	JA	77		

#### Alerting Abstract EP A2

A micro-kernel is loaded into memory (102) of a data processing system (100), config. an inter-process communications sub-system. A first task and a second task are formed. A first message with the first task is sent to the inter-process communications sub-system to provide a data block to the second task. The first message includes an indication that the data block is to be treated as temporary data.

A temporary data buffer is provided in the memory. The data block is stored in the temporary data buffer area having a pointer address with the inter-process communications subsystem and the pointer address is provided to the second task. A reply message is received at the subsystem from the second task, making the buffer area available for the storage of other temporary data.

USE/ ADVANTAGE - Relates to data processing systems and to improvements in operating systems for data processing systems.

USE/ ADVANTAGE - Temporary data module manages inter-process communication that must take place between many clients and servers in Micro-kernel System in fast and efficient manner.

**Title Terms/Index Terms/Additional Words:** INTER; PROCESS; COMMUNICATE; MICRO; KERNEL; ARCHITECTURE; DATA; SYSTEM CONTAINING; SUBSYSTEM; LOAD; MEMORY; FORMING; TWO; TASK; SEND; MESSAGE; INDICATE; TEMPORARY; SUB; STORAGE; BUFFER; AREA; AVAILABLE; REPLY; RECEIVE

#### Class Codes

International Classification (Main): G06F-009/46  
(Additional/Secondary): G06F-015/16

File Segment: EPI;

DWPI Class: T01

Manual Codes (EPI/S-X): T01-F02C; T01-F05A; T01-H03D; T01-M02C; T01-S

**Alerting Abstract** ...buffer is provided in the memory. The data block is stored in the temporary data buffer area having a pointer address with the inter-process communications subsystem and the pointer address is provided to the second task. A reply message is received at the subsystem from the second task, making the buffer area available for the storage of other temporary data...

#### Original Publication Data by Authority

#### Original Abstracts:

...The temporary data module can then reuse the buffer for subsequent calls. In this manner, the temporary data module manages the interprocess communication that must take place between the many clients and servers in a...

...

38/5,K/14 (Item 14 from file: 350)

DI ALCO (R) File 350: Derwent WPI X

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0007298920 - Drawing available

WPI ACC NO: 1995-359649/ 199547

XRPX Acc No: N1995-267324

**Adaptive path search among network nodes maintaining topological data - employing path search tables for nodes able to recognise critical events and to modify data with circulation of messages to other nodes**

Patent Assignee: SIEMENS AG (SI E)

Inventor: SUTTER W THANNER T; WEBER G

**Patent Family** (5 patents, 11 countries)

Patent				Application			
Number	Kind	Date	Number	Kind	Date	Update	
DE 4430993	C1	19951026	DE 4430993	A	19940831	199547	B
EP 700224	A2	19960306	EP 1995113122	A	19950821	199614	E
CA 2157144	A	19960301	CA 2157144	A	19950829	199624	E
US 5732072	A	19980324	US 1995521904	A	19950831	199819	E
CA 2157144	C	20060725	CA 2157144	A	19950829	200650	E

Priority Applications (no., kind, date): DE 4430993 A 19940831

#### Patent Details

Number	Kind	Lang	Pg	Dwg	Filing Notes
DE 4430993	C1	DE	9	3	
EP 700224	A2	DE	9	3	
Regional Designated States, Original: BE CH FR GB IT LI NL SE					
CA 2157144	A	EN			
US 5732072	A	EN	9	3	
CA 2157144	C	EN			

#### Alerting Abstract DE C1

At each node, call handling and path searching are performed by switching units (SU) connected to a ring (RU) together with concentrators (TU) for line termination units (LTU). An active switching unit (SU-PM1) performs all communications within the node and with other nodes, and optimising computations.

A standby unit (SU-PM2) working in parallel actualises only its data base for the adaptive search method in order to take over the tasks of the

active unit when the latter fails. Any **event** influencing the topology instigates a corresp. round-robin message to the other nodes.

USE/ADVANTAGE - In e.g. packet-switched text and data networks, number of identical round-robin messages is reduced substantially in network possessing sufficient redundancy to cope with failure of individual links.

**Title Terms/Index Terms/Additional Words:** ADAPT; PATH; SEARCH; NETWORK;  
NODE; MAINTAIN; TOPOLOGY; DATA; EMPLOY; TABLE; ABLE; RECOGNISE;  
CRITICAL; EVENT; MODIFIED; COULATE; MESSAGE

#### Class Codes

International Classification (+ Attributes)

IPC - Level Value Position Status Version

H04L-0012/02 A I L B 20060101  
H04L-0012/18 A I L B 20060101  
H04L-0012/24 A I L B 20060101  
H04L-0012/56 A I L R 20060101  
H04L-0012/56 A I R 20060101  
H04Q-0003/495 A I F B 20060101  
H04Q-0003/66 A I L R 20060101  
H04Q-0003/66 A I R 20060101  
H04L-0012/02 C I L B 20060101  
H04L-0012/18 C I L B 20060101  
H04L-0012/24 C I L B 20060101  
H04L-0012/56 C I L R 20060101  
H04L-0012/56 C I R 20060101  
H04Q-0003/48 C I F B 20060101  
H04Q-0003/64 C I L R 20060101  
H04Q-0003/64 C I R 20060101

US Classification, Issued: 370400000, 370255000

File Segment: EPI;

DWPI Class: W01

Manual Codes (EPI/S-X): W01-A03B; W01-A06A; W01-A06G2; W01-B02

**Alerting Abstract** ... At each node, **call handling** and path searching are performed by switching units (SU) connected to a ring (RU) together...

...only its data base for the adaptive search method in order to take over the **tasks** of the active unit when the latter fails. Any **event** influencing the topology instigates a corresp. round-robin message to the other nodes...

#### Original Publication Data by Authority

#### Original Abstracts:

Adaptive path search among network nodes maintaining topological data<br>At each node, **call handling** and path searching are **performed by** switching units (SU) connected to a ring (RU) together with concentrators (TU) for line termination...

...only its data base for the adaptive search method in order to take over the **tasks** of the active unit when the latter fails. Any **event** influencing the topology instigates a corresp. round-robin message to the other nodes...

...network data, routing tables for connection paths to all remaining network nodes are created. If an **event** that influences the network topology of the communication network occurs, on the one hand the...

#### Claims:

...defined optimization criteria routing tables for connection paths to all remaining network nodes that are **possible** destination nodes; if an **event** that influences the topology of the communication network occurs, updating network data maintained by a...

Basic Derwent Week: 199547

38/5, K/15 (Item 15 from file: 350)

DI ALQ R File 350: Derwent WPI X

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0005826419 - Drawing available  
WPI ACC NO: 1992-050429/ 199207  
XRPX Acc. No.: N1992-038577

**Message-based debugging appts. for data processing system - involves pre-processing which includes call to control routine in independent activation of monitoring process and process to be tested**

Patent Assignee: BULL HN INFORMATION SYSTEMS INC (HON); BULL HN INFORMATION SYSTEMS ITAL SPA (HON)

Inventor: BASSI F; FURLANI L; MASON J

**Patent Family** (4 patents, 7 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
EP 470322	A	19920212	EP 1990830370	A	19900807	199207	B
US 5319645	A	19940607	US 1991738064	A	19910730	199422	B
EP 470322	B1	19960403	EP 1990830370	A	19900807	199618	E
DE 69026379	E	19960509	DE 69026379	A	19900807	199624	E
			EP 1990830370	A	19900807		

Priority Applications (no., kind, date): EP 1990830370 A 19900807

#### Patent Details

Number	Kind	Lang	Pg	Dwg	Filing	Notes
EP 470322	A	EN				
Regional Designated	States, Original:	BE CH DE FR GB IT LI				
US 5319645	A	EN	13	9		
EP 470322	B1	EN	17	9		
Regional Designated	States, Original:	DE FR GB IT				
DE 69026379	E	DE			Application EP 1990830370	
					Based on CPI patent EP 470322	

#### Alerting Abstract EP A

The method involves loading a monitoring program and a second source program to be tested into the system. A second object program obtained by a preprocessing which includes a **call to a control routine** at each executable row is loaded. Monitoring processes are activated in any order according to the programs.

Occurred activation of the second process is signalled to the first process using a message stored in a message queue. Modalities to be followed in the further proceeding of the second process are signalled to the second process on detection of the first message by the first process.

USE - For program debuffing and testing of correctness. @16pp

Dwg. No. 5, 6/9/@

#### Equivalent Alerting Abstract US A

The method comprises the loading in a data processing system of a monitoring program of at least a source program to be testing and of at least an object program achieved by the source program through a preprocessing which includes, at each executable program row, a **call to a control routine**, in the independent activation of a monitoring process based on the monitoring program and of a process to be tested, based on the object program the two processes interacting by use of message queues.

USE - Debugging and testing the correctness of programs.

**Title Terms/Index Terms/Additional Words:** MESSAGE; BASED; DEBUG; APPARATUS; DATA; PROCESS; SYSTEM; PRE; CALL; CONTROL; ROUTINE; INDEPENDENT; ACTIVATE; MONITOR; TEST

#### Class Codes

International Classification (Main): G06F-011/00  
US Classification, Issued: 371019000, 364944600, 364946000, 364267000, 364267910, 364267800, 364DI 0001, 364DI 0002

File Segment: EPI;

DWPI Class: T01

Manual Codes (EPI/S-X): T01-J20C

...involves **pre-processing which includes call to control routine in independent activation of monitoring process and process to be tested**

**Alerting Abstract** ...tested into the system. A second object program obtained by a preprocessing which includes a **call to a control routine** at each executable row is loaded. Monitoring processes are activated in any order according to...



**Equivalent Alerting Abstract** ...by the source program through a preprocessing which includes, at each executable program row, a call to a control routine, in the independent activation of a monitoring process based on the monitoring program and of...

#### Original Publication Data by Authority

#### Original Abstracts:

...by the source program through a preprocessing which includes, at each executable program row, a call to a control routine, in the independent activation of a monitoring process based on the monitoring program and of a process to be tested, based on the object...

...by the source program through a preprocessing which includes, at each executable program row, a call to a control routine, in the independent activation of a monitoring process based on the monitoring program and of a process to be tested, based on the object...

#### Claims:

...from said second source program by a preprocessing which includes, at each executable row a call to a control routine, - activation, through said first user terminal of a first monitoring process based on said first monitoring program and activation of a...

...from said second source program by a preprocessing which includes, at each executable row, a call to a control routine (X-F), - activation, through said first user terminal of a first monitoring process based on said first monitoring program and activation of a second process executing said second object program, said activations occurring in any order, - signalling by said second process to said first monitoring process, by means of...

...said first monitoring process managing break points which stop the execution of said second object program at predetermined points and said control routine (X-F) having the task to write said first queue (Q1), to read said second queue (Q2) and to detect the presence or absence of break points operation which includes in said source program at each executable row, a call to a control routine, comprising the steps of: activating through said first user terminal first monitoring process based on...

...said object program said activations occurring in any order, signaling by said second process to said first monitoring process by means of a first message stored in a first message queue the occurrence of the...

Basic Derwent Week: 199207

38/5,K/16 (Item 16 from file: 350)

DI ALCO R) File 350: Derwent WPI X

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0005390131 - Drawing available

WPI ACC NO: 1990-100591/ 199014

Handling real time applications for computer processing - achieving entry of application solely by branch process in sub-programme of memory element located in waiting line selected

Patent Assignee: SIEMENS AG (SI); SIEMENS NIXDORF INFORMATION AG (SI EI)

Inventor: HUELTERS H; HUELTERS H

Patent Family (4 patents, 12 countries)

Number	Kind	Date	Number	Kind	Date	Update
EP 360900	A	19900404	EP 1988116011	A	19880928	199014 B
EP 360900	B1	19930602	EP 1988116011	A	19880928	199322 E
DE 3881521	G	19930708	DE 3881521	A	19880928	199328 E
			EP 1988116011	A	19880928	
ES 2040799	T3	19931101	EP 1988116011	A	19880928	199348 E

Priority Applications (no., kind, date): EP 1988116011 A 19880928

#### Patent Details

Number	Kind	Lan	Pg	Dwg	Filing	Notes
EP 360900	A	DE	16	17		
Regional	Designated	States	Original	AT	BE	CH DE ES FR GB GR IT LI LU NL

ES 2040799 T3 ES

A waiting line is used causing no difficulty for priority calls. There is a memory element simply located in the waiting line selected, with an entry indicator and an exit indicator for each one of them. The entry of an application is achieved solely by a branch process in a sub-programme of the memory element.

**ADVANTAGE** - Processing time of a computer system is used efficiently.

### Class Codes

File Segment: EPI:

Original Publication Data by Authority

system related to program related, that signify interrupt levels, priorities in the same way, for job calls to the processes correspond, program related job calls being entered in queues (WS-ME, WS-SVC), - having means (IDEC) for monitoring and evaluating the priority level of the events signifying a job call having the processes and - having means for forwarding the job call, having the high priority in case to the associated program, if necessary with simultaneous interruption of a current process initiated earlier by a job call.

the individual process levels (for example PZEO to PZET), of which each queue only accepts job calls having the same priority level and can be identified directly on the basis of the call instruction (XCOLXX) invoking the job call. - in that the entry of the individual job calls (VR) into the queues of said queue systems effected by the respective process (PZ) invoking the job call, - in that the memory elements (EL...) forming the respective queue have in each case a control entry (AD-UP/I-UP/ENK) which can be addressed directly by an entry pointer (EPxy), and which, in the case of a subsequent memory element that can be occupied by a job call (VR), points to the start field of an entry subroutine (UP) contained in every... is continued, - in that in the case of handling, the removal and forwarding of a job call (VR), temporarily stored in a queue, to the associated process is executed by the operating system (BP) formed by a plurality of short program sections that cannot be interrupted in each case and - in that the acceptance of interrupt messages (INT) of high-priority time-critical processes for the removal of job calls to lower-priority processes is made possible between the program sections in each case by releasing the means (IDEC) for the monitoring of the interrupt events.

